

www.elsevier.com/locate/clinph

# Table of Contents

## VOLUME 112 (2001)

Editorials	
Editorial	
M. Hallett, P.M. Rossini	
Neural mechanisms of unconscious cognitive processing C.D. Yingling (USA)	157
From brainstem to cortex: neurobiologic research provides keys to the riddles, mysteries and enigmas of brain dysfunction G.C. Galbraith (USA)	72
Spatial enhancement of EEG data by surface Laplacian estimation: the use of magnetic resonance imaging-based head models F. Babiloni, F. Cincotti, F. Carducci, P.M. Rossini, C. Babiloni (Italy)	724
The 'motor' inaccuracy in neurogenic motor evoked potentials V. Deletis (USA)	1365
Meeting Reports	
Minutes of the IFCN Council Meeting	1569
Minutes of the IFCN General Assembly	1571
Invited Reviews	
Disorders of membrane channels or channelopathies G.G. Celesia (USA)	2
Therapeutic application of repetitive transcranial magnetic stimulation: a review E.M. Wassermann, S.H. Lisanby (USA)	136
Reviews	
Motor unit number estimation in human neurological diseases and animal models J.M. Shefner (USA)	955
Excitability of human axons D. Burke, M.C. Kiernan, H. Bostock (Australia, UK)	1575
Evoked potentials for evaluation of multiple sclerosis	
P. Fuhr, L. Kappos (Switzerland)	2185
Clinical neurophysiology of ALS A. Eisen, M. Swash (Canada, UK)	2190
Original Research Articles	
EEG responses to combined somatosensory and transcranial magnetic stimulation  M. Schürmann, V.V. Nikouline, S. Soljanlahti, M. Ollikainen, E. Başar, R.J. Ilmoniemi (Germany, Finland, Turkey)	19
Intracranial electroencephalographic changes in deep anesthesia H. Karasawa, K. Sakaida, S. Noguchi, K. Hatayama, H. Naito, N. Hirota, K. Sugiyama, J. Ueno, H. Nakajima, Y. Fukada,	
H. Kin (Japan)	2:
Early serial EEG in hypoxic ischaemic encephalopathy	
R.M. Pressler, G.B. Boylan, M. Morton, C.D. Binnie, J.M. Rennie (UK)	3
Investigation of non-linear properties of multichannel EEG in the early stages of Parkinson's disease	
L. Pezard, R. Jech, E. Růžička (France, Czech Republic)	38
Experimental tests of EEG source localization accuracy in spherical head models  P. Noil Cuffe, D. L. Schomer, I.P. Just, H. Plyma, (USA)	4
B. Neil Cuffin, D.L. Schomer, J.R. Ives, H. Blume (USA)	40



www.elsevier.com/locate/clinph

# Table of Contents

## VOLUME 112 (2001)

Editorials	
Editorial	
M. Hallett, P.M. Rossini	
Neural mechanisms of unconscious cognitive processing C.D. Yingling (USA)	157
From brainstem to cortex: neurobiologic research provides keys to the riddles, mysteries and enigmas of brain dysfunction G.C. Galbraith (USA)	72
Spatial enhancement of EEG data by surface Laplacian estimation: the use of magnetic resonance imaging-based head models F. Babiloni, F. Cincotti, F. Carducci, P.M. Rossini, C. Babiloni (Italy)	724
The 'motor' inaccuracy in neurogenic motor evoked potentials V. Deletis (USA)	1365
Meeting Reports	
Minutes of the IFCN Council Meeting	1569
Minutes of the IFCN General Assembly	1571
Invited Reviews	
Disorders of membrane channels or channelopathies G.G. Celesia (USA)	2
Therapeutic application of repetitive transcranial magnetic stimulation: a review E.M. Wassermann, S.H. Lisanby (USA)	136
Reviews	
Motor unit number estimation in human neurological diseases and animal models J.M. Shefner (USA)	955
Excitability of human axons D. Burke, M.C. Kiernan, H. Bostock (Australia, UK)	1575
Evoked potentials for evaluation of multiple sclerosis	
P. Fuhr, L. Kappos (Switzerland)	2185
Clinical neurophysiology of ALS A. Eisen, M. Swash (Canada, UK)	2190
Original Research Articles	
EEG responses to combined somatosensory and transcranial magnetic stimulation  M. Schürmann, V.V. Nikouline, S. Soljanlahti, M. Ollikainen, E. Başar, R.J. Ilmoniemi (Germany, Finland, Turkey)	19
Intracranial electroencephalographic changes in deep anesthesia H. Karasawa, K. Sakaida, S. Noguchi, K. Hatayama, H. Naito, N. Hirota, K. Sugiyama, J. Ueno, H. Nakajima, Y. Fukada,	
H. Kin (Japan)	2:
Early serial EEG in hypoxic ischaemic encephalopathy	
R.M. Pressler, G.B. Boylan, M. Morton, C.D. Binnie, J.M. Rennie (UK)	3
Investigation of non-linear properties of multichannel EEG in the early stages of Parkinson's disease	
L. Pezard, R. Jech, E. Růžička (France, Czech Republic)	38
Experimental tests of EEG source localization accuracy in spherical head models  P. Noil Cuffe, D. L. Schomer, I.P. Just, H. Plyma, (USA)	4
B. Neil Cuffin, D.L. Schomer, J.R. Ives, H. Blume (USA)	40

Electrocortical brain activity, cerebral haemodynamics and oxygenation during progressive hypotension in newborn piglets A.W.D. Gavilanes, J.S.H. Vles, K. von Siebenthal, J.P. Reulen, F.H. Nieman, R. van Sprundel, C.E. Blanco	52
(The Netherlands, Switzerland) Local Lyapunov exponents detect epileptic zones in spike-less interictal MEG recordings	52
Z.J. Kowalik, A. Schnitzler, HJ. Freund, O.W. Witte (Germany)  Movement-related cortical potentials associated with progressive muscle fatigue in a grasping task	60
J. Johnston, M. Rearick, S. Slobounov (USA)	68
Cutaneous and mixed nerve silent periods in syringomyelia	70
I. Stetkarova, M. Kofler, A.A. Leis (Czech Republic, Austria, USA) Cricopharyngeal sphincter muscle responses to transcranial magnetic stimulation in normal subjects and in patients with dysphagia	78
C. Ertekin, B. Turman, S. Tarlaci, M. Celik, I. Aydogdu, Y. Secil, N. Kiylioglu (Turkey, Australia)	86
Deficits in sensorimotor control during precise hand movements in Huntington's disease  M. Schwarz, S.J. Fellows, C. Schaffrath, J. Noth (Germany)	95
Hemispheric asymmetry of ipsilateral motor cortex activation during unimanual motor tasks: further evidence for motor dominance	
U. Ziemann, M. Hallett (Germany, USA) Inhibition of ipsilateral motor cortex during phasic generation of low force	107
J. Liepert, C. Dettmers, C. Terborg, C. Weiller (Germany)	114
Information flow from the sensorimotor cortex to muscle in humans	122
T. Mima, T. Matsuoka, M. Hallett (USA) Estimating motor-unit architectural properties by analyzing motor-unit action potential morphology	122
Z.C. Lateva, K.C. McGill (USA)	127
Sequential changes of orthodromic sensory nerve action potentials induced by experimental compression of the median nerve at the wrist  T. Toni, T. Hebido, L. Kimura (Jopen, USA)	136
T. Tani, T. Ushida, J. Kimura (Japan, USA) Radial nerve F-waves: normative values with surface recording from the extensor indicis muscle	130
E.S. Papathanasiou, E. Zamba, S.S. Papacostas (Cyprus)	145
Enhanced gain of blink reflex responses to ipsilateral supraorbital nerve afferent inputs in patients with facial nerve palsy D. Manca, E. Muñoz, P. Pastor, F. Valldeoriola, J. Valls-Solé (Spain) Subliminal visual oddball stimuli evoke a P300 component	153
E. Bernat, H. Shevrin, M. Snodgrass (USA)	159
The attentional effects of peripheral cueing as revealed by two event-related potential studies S. Fu, S. Fan, L. Chen, Y. Zhuo (China)	172
The mode of short-term memory encoding as indicated by event-related potentials in a memory scanning task with distractions  I. Wolach, H. Pratt (Israel)	186
Test-retest reliability of electrophysiological parameters related to cognitive motor control	
A.J. Fallgatter, A.J. Bartsch, W.K. Strik, T.J. Mueller, S.S. Eisenack, B. Neuhauser, D. Aranda, M.J. Herrmann (Germany, Switzerland)	198
Somatosensory evoked fields in comatose survivors after severe traumatic brain injury	170
M. Iwasaki, N. Nakasato, A. Kanno, K. Hatanaka, Ki. Nagamatsu, Y. Nagamine, T. Yoshimoto (Japan)	205
The effects of ocular artifacts on (lateralized) broadband power in the EEG D. Hagemann, E. Naumann (USA, Germany)	215
Sensitivity of recordings at sphenoidal electrode site for detecting seizure onset: evidence from scalp, superficial and deep	210
foramen ovale recordings	232
N. Kissani, G. Alarcon, M. Dad, C.D. Binnie, C.E. Polkey (UK, Morocco, Spain)  Epileptic seizures are characterized by changing signal complexity	232
G.K. Bergey, P.J. Franaszczuk (USA)	241
Motor thresholds in humans: a transcranial magnetic stimulation study comparing different pulse waveforms, current directions and stimulator types	
T. Kammer, S. Beck, A. Thielscher, U. Laubis-Herrmann, H. Topka (Germany)	250
Repetitive transcranial magnetic stimulation to SMA worsens complex movements in Parkinson's disease	250
L.S. Boylan, S.L. Pullman, S.H. Lisanby, K.E. Spicknall, H.A. Sackeim (USA)  Motor control in simple bimanual movements: a transcranial magnetic stimulation and reaction time study	259
H. Foltys, R. Sparing, B. Boroojerdi, T. Krings, I.G. Meister, F.M. Mottaghy, R. Töpper (Germany, USA)	265
Piracetam affects facilitatory I-wave interaction in the human motor cortex	275
S. Wischer, W. Paulus, M. Sommer, F. Tergau (Germany)  Heat-sensitive conduction block in ulnar neuropathy at the elbow	275
S.B. Rutkove, M.A. Geffroy, S.H. Lichtenstein (USA)	280
What is the best way to assess focal slowing of the ulnar nerve?	286
J.G. van Dijk, J. Meulstee, M.J. Zwarts, F. Spaans (The Netherlands)	286

Equine muscular dystrophy with myotonia	
P. Montagna, R. Liguori, L. Monari, P.N. Strong, R. Riva, V. Di Stasi, G. Gandini, M. Cipone (Italy, UK)	294
Single fiber EMG and repetitive nerve stimulation of the same extensor digitorum communis muscle in myasthenia gravis	
M. Sonoo, H. Uesugi, A. Mochizuki, Y. Hatanaka, T. Shimizu (Japan)	300
Effects of high frequency repetitive transcranial magnetic stimulation on P <sub>300</sub> event-related potentials	
H. Jing, M. Takigawa, K. Hamada, H. Okamura, Y. Kawaika, T. Yonezawa, H. Fukuzako (Japan)	304
A new application for the sympathetic skin response: the evaluation of auditory thresholds in cochlear implant patients	
Y. Péréon, D. Laplaud, S. Nguyen The Tich, E. Radafy (France)	314
Electrophysiological evidence of persisting unilateral auditory cortex dysfunction in the late outcome of Landau and	
Kleffner syndrome	
N. Wioland, G. Rudolf, M.N. Metz-Lutz (France)	319
Vibration-induced inhibition of the early components of the tibial nerve somatosensory evoked potential is mediated at a	
spinal synapse	22
J.E. Misiaszek, J.D. Brooke (Canada, USA)	324
Magnetoneurography of evoked compound action currents in human cervical nerve roots	221
BM. Mackert, M. Burghoff, LH. Hiss, M. Nordahn, P. Marx, L. Trahms, G. Curio (Germany)	330
Hyperexcitatory activity in visual cortex in homonymous hemianopia after stroke	22
C. Braun, J. Weber, U. Schiefer, M. Skalej, T. Dietrich (Germany)	330
Factor structure and ammonia-related modulation of the human retinal oscillatory potentials  M. Boelko, S. Carozzo, F. De Carli, S. Massimilla, L. Nobili, C. Ogliastro, W.G. Sappita (Italy, USA)	34
M. Beelke, S. Carozzo, F. De Carli, S. Massimilla, L. Nobili, C. Ogliastro, W.G. Sannita (Italy, USA) Impaired visual function in glaucoma	34
V. Parisi (Italy)	35
Identification of the stimulated hemiretina in primary school children and adults based on left and right hemifield pattern	55
reversal visual evoked potentials – a comparative study	
K. Hoffmann, L. Leistritz, M. Feucht, F. Benninger, D. Reiter, H. Witte (Germany, Austria)	359
Age-dependent changes in sleep EEG topography	
HP. Landolt, A.A. Borbély (Switzerland)	369
The localization of spontaneous brain activity: first results in patients with cerebral tumors	
A. de Jongh, J.C. de Munck, J.C. Baayen, E.J. Jonkman, R.M. Heethaar, B.W. van Dijk (The Netherlands)	378
Propofol anesthesia induces phase synchronization changes in EEG	
M. Koskinen, T. Seppänen, J. Tuukkanen, A. Yli-Hankala, V. Jäntti (Finland)	380
Event-related desynchronization during anticipatory attention for an upcoming stimulus: a comparative EEG/MEG study	
M.C.M. Bastiaansen, K.B.E. Böcker, C.H.M. Brunia, J.C. de Munck, H. Spekreijse (The Netherlands)	39:
Adults with fast-discharges absence seizures	
L. Vercueil (France)	40
Separation of spikes from background by independent component analysis with dipole modeling and comparison to	
intracranial recording	40
K. Kobayashi, I. Merlet, J. Gotman (Japan, Canada)	40:
Dipole modeling of scalp electroencephalogram epileptic discharges: correlation with intracerebral fields	41
I. Merlet, J. Gotman (Canada)	414
Potentials recorded at the scalp by stimulation near the human subthalamic nucleus  P. Achby G. Paradiso J.A. Spirit Cyr. P. Chan A.E. Long A.M. Lorano (Conada)	43
P. Ashby, G. Paradiso, J.A. Saint-Cyr, R. Chen, A.E. Lang, A.M. Lozano (Canada)  Neurophysiological mechanisms underlying motor evoked potentials in anesthetized humans. Part 1. Recovery time of	43
corticospinal tract direct waves elicited by pairs of transcranial electrical stimuli	
V. Deletis, V. Isgum, V.E. Amassian (USA, Croatia)	43
Neurophysiological mechanisms underlying motor evoked potentials in anesthetized humans. Part 2. Relationship between	
epidurally and muscle recorded MEPs in man	
V. Deletis, Z. Rodi, V.E. Amassian (USA, Slovenia)	44:
Crossed effects of muscle vibration on motor-evoked potentials	
A. Kossev, S. Siggelkow, HH. Kapels, R. Dengler, J.D. Rollnik (Bulgaria, Germany)	45
Terminal latency index and modified F ratio in distinction of chronic demyelinating neuropathies	
S. Attarian, J.P. Azulay, J. Boucraut, N. Escande, J. Pouget (France)	45
Simulation of the normal concentric needle electromyogram by using a muscle model	
E. Stålberg, L. Karlsson (Sweden)	46
Pudendal nerve terminal motor latency: age effects and technical considerations	
JP. Lefaucheur, R. Yiou, C. Thomas (France)	472
Overlap of attention and movement-related activity in lateralized event-related brain potentials	
R. Oostenveld, P. Praamstra, D.F. Stegeman, A. van Oosterom (The Netherlands)	47
Differences between the N1 waves of the responses to interaural time and intensity disparities: scalp topography and dipole sources	
P. Ungan, S. Yagcioglu, C. Goksoy (Turkey)	48:

Tabla	of	Content:
IUDIE	UI	Comeni

Near-DC magnetic fields following a periodic presentation of long-duration tonebursts	
C. Lammertmann, B. Lütkenhöner (Germany)	499
Auditory response following vocalization: a magnetoencephalographic study	
A. Gunji, M. Hoshiyama, R. Kakigi (Japan)	514
Sleep spindle characteristics in healthy subjects of different age groups	
A. Nicolas, D. Petit, S. Rompré, J. Montplaisir (France, Canada)	521
Scalp electrode impedance, infection risk, and EEG data quality T.C. Ferree, P. Luu, G.S. Russell, D.M. Tucker (USA)	536
A convenient method for detecting electrolyte bridges in multichannel electroencephalogram and event-related	250
potential recordings	
C.E. Tenke, J. Kayser (USA)	545
Self-initiation of EEG-based communication in paralyzed patients	
J. Kaiser, J. Perelmouter, I.H. Iversen, N. Neumann, N. Ghanayim, T. Hinterberger, A. Kübler, B. Kotchoubey,	
N. Birbaumer (Germany, USA, Italy)	551
Weighted averaging of steady-state responses  M.S. John, A. Dimitrijevic, T.W. Picton (Canada)	555
Induced electrocorticographic gamma activity during auditory perception (Brazier Award-winning article, 2001)	333
N.E. Crone, D. Boatman, B. Gordon, L. Hao (USA)	565
A convenient method to reduce crosstalk in surface EMG (Cobb Award-winning article, 2001)	
J.P.P. van Vugt, J.G. van Dijk (The Netherlands)	583
Optimization of facilitation related to threshold in transcranial magnetic stimulation	
T.R. Han, J.H. Kim, J.Y. Lim (South Korea)	593
Impairment of motor cortex activation and deactivation in Parkinson's disease	600
R. Chen, S. Kumar, R.R. Garg, A.E. Lang (Canada)  A medial to lateral shift in pre-movement cortical activity in hemi-Parkinson's disease	600
R. Cunnington, W. Lalouschek, G. Dirnberger, P. Walla, G. Lindinger, S. Asenbaum, T. Brücke, W. Lang	
(Austria, Australia)	608
Cerebellar stimulation in acute cerebellar ataxia	
K. Matsunaga, T. Uozumi, T. Hashimoto, S. Tsuji (Japan)	619
Interhemispheric interaction between the hand motor areas in patients with cortical myoclonus	
R. Hanajima, Y. Ugawa, S. Okabe, K. Yuasa, Y. Shiio, N.K. Iwata, I. Kanazawa (Japan)	623
Assessment of reorganization in the sensorimotor cortex after upper limb amputation  P. Schwarleria, K. Witschen, F. Jansson, B. Blasser, B. Dattwirkel, M. Zarra, J. P. Melin, M. Targerthoff (Common)	627
P. Schwenkreis, K. Witscher, F. Janssen, B. Pleger, R. Dertwinkel, M. Zenz, JP. Malin, M. Tegenthoff (Germany) Remote F-wave changes after local botulinum toxin application	627
K. Wohlfarth, M. Schubert, B. Rothe, J. Elek, R. Dengler (Germany)	636
Reflex receptive fields for human withdrawal reflexes elicited by non-painful and painful electrical stimulation of the foot sole	
O.K. Andersen, F.A. Sonnenborg, L. Arendt-Nielsen (Denmark)	641
Intracerebral event-related potentials to subthreshold target stimuli	
M. Brázdil, I. Rektor, P. Daniel, M. Dufek, P. Jurák (Czech Republic)	650
Impairment of an event-related potential correlate of memory in schizophrenia: effects of immediate and delayed word repetition	
K. Matsumoto, H. Matsuoka, H. Yamazaki, H. Sakai, T. Kato, N. Miura, M. Nakamura, K. Osakabe, H. Saito, T. Ueno,	662
M. Sato (Japan)  The heartbeat-evoked brain potential in patients suffering from diabetic neuropathy and in healthy control persons	662
C. Leopold, R. Schandry (Germany)	674
Melatonin as a sleep inductor for electroencephalogram recordings in children	
E. Wassmer, E. Quinn, W. Whitehouse, S. Seri (UK, Italy)	683
Psychomotor EEG variant of Gibbs: an association with underlying structural pathology	
M.J. Hennessy, M. Koutroumanidis, E. Hughes, C.D. Binnie (UK)	686
Space-oriented segmentation and 3-dimensional source reconstruction of ictal EEG patterns	(00
G. Lantz, C.M. Michel, M. Seeck, O. Blanke, L. Spinelli, G. Thut, T. Landis, I. Rosén (Switzerland, Sweden)	688
Exploratory data analysis of evoked response single trials based on minimal spanning tree N.A. Laskaris, A.A. Ioannides (Japan)	698
The five percent electrode system for high-resolution EEG and ERP measurements	020
R. Oostenveld, P. Praamstra (The Netherlands, UK)	713
Auditory sensory memory as indicated by mismatch negativity in chronic alcoholism	
C. Grau, M.D. Polo, E. Yago, A. Gual, C. Escera (Spain)	728
The vanishing point of the mismatch negativity at sleep onset	
H. Nittono, D. Momose, T. Hori (Japan)	732
Alpha activity as an index of cortical inhibition during sustained internally controlled attention in infants	740
E.V. Orekhova, T.A. Stroganova, I.N. Posikera (Russia)	140

Test-retest consistency of the event-related desynchronization/event-related synchronization of the 4-6, 6-8, 8-10 and	
10–12 Hz frequency bands during a memory task	75
C.M. Krause, L. Sillanmäki, A. Häggqvist, R. Heino (Finland)  Neurobiologic responses to speech in noise in children with learning problems: deficits and strategies for improvement	75
J. Cunningham, T. Nicol, S.G. Zecker, A. Bradlow, N. Kraus (USA)	75
Temporal non-linearities of the cochlear amplifier revealed by maximum length sequence stimulation	
A.R.D. Thornton, K. Shin, E. Gottesman, J. Hine (UK)	76
Separation of mismatch negativity and the N1 wave in the auditory cortex of the cat: a topographic study	
Z. Pincze, P. Lakatos, C. Rajkai, I. Ulbert, G. Karmos (Hungary)	77
Improved neuromagnetic detection of fetal and neonatal auditory evoked responses	70
J.M. Lengle, M. Chen, R.T. Wakai (USA)	78.
Somatosensory evoked potential recovery in myotonic dystrophy H. Mochizuki, R. Hanajima, H. Kowa, Y. Motoyoshi, H. Ashida, K. Kamakura, K. Motoyoshi, Y. Ugawa (Japan)	79
Hypersomnia in the Prader Willi syndrome: clinical-electrophysiological features and underlying factors	12.
R. Manni, L. Politini, L. Nobili, F. Ferrillo, C. Livieri, E. Veneselli, R. Biancheri, M. Martinetti, A. Tartara (Italy)	80
Age and sex effects in the EEG: development of the normal child	
A.R. Clarke, R.J. Barry, R. McCarthy, M. Selikowitz (Australia)	80
Age and sex effects in the EEG: differences in two subtypes of attention-deficit/hyperactivity disorder	
A.R. Clarke, R.J. Barry, R. McCarthy, M. Selikowitz (Australia)	81
Mutual information analysis of the EEG in patients with Alzheimer's disease	0.00
J. Jeong, J.C. Gore, B.S. Peterson (USA)	82
Lateralization of temporal lobe foci: depth versus subdural electrodes	830
S. Eisenschenk, R.L. Gilmore, J.E. Cibula, S.N. Roper (USA) High-resolution EEG: a new realistic geometry spline Laplacian estimation technique	0.5
B. He, J. Lian, G. Li (USA)	84.
Concentric-needle versus macro EMG II. Detection of neuromuscular disorders	
J. Finsterer, A. Fuglsang-Frederiksen (Austria, Denmark)	85.
Sympathetic skin response evoked by respiratory stimulation as a measure of sympathetic function	
Y. Kira, T. Ogura, S. Aramaki, T. Kubo, T. Hayasida, Y. Hirasawa (Japan)	86
A comparison between different parameters in F-wave studies	0.6
J.A.M. Nobrega, G.M. Manzano, P.T. Monteagudo (Brazil)	86
Simulation of EMG in pathological situations  E. Stålbarg, L. Karlsson (Swadan)	86
E. Stålberg, L. Karlsson (Sweden) Intraoperative monitoring of the bulbocavernosus reflex: the method and its problems	00
Z. Rodi, D.B. Vodušek (Slovenia)	87
The shortening reaction of forearm muscles: the influence of central set	
G. Miscio, F. Pisano, C. Del Conte, D. Pianca, R. Colombo, M. Schieppati (Italy)	88
Additional somatosensory information does not improve cerebellar adaptation during catching	
C.E. Lang, A.J. Bastian (USA)	89.
Influence of task-related ipsilateral hand movement on motor cortex excitability	00
M. Zaaroor, H. Pratt, A. Starr (USA)	90
Disinhibition of somatosensory and motor cortex in mitochondriopathy without myoclonus J. Liepert, J. Haueisen, S. Hegemann, C. Weiller (Germany)	91
Event-related desynchronization in reaction time paradigms: a comparison with event-related potentials and corticospinal excitability	
L. Leocani, C. Toro, P. Zhuang, C. Gerloff, M. Hallett (USA, Italy)	92
Mechanisms influencing stimulus-response properties of the human corticospinal system	
B. Boroojerdi, F. Battaglia, W. Muellbacher, L.G. Cohen (USA, Germany)	93
The triple stimulation technique to study central motor conduction to the lower limbs	
R. Bühler, M.R. Magistris, A. Truffert, C.W. Hess, K.M. Rösler (Switzerland)	93
The auditory 'C-process': analyzing the spectral envelope of complex sounds	06
S.J. Jones, N. Perez (UK)  Parkinson's disease abanges the balance of areat and affect visual responses an avalled notantial study.	96.
Parkinson's disease changes the balance of onset and offset visual responses: an evoked potential study  F. Bandini, M. Pierantozzi, I. Bodis-Wollner (Italy, USA)	970
Arousals and obstructive sleep apnea syndrome in children	711
S. Scholle, G. Zwacka (Germany)	98
Inverse coupling between ultradian oscillations in delta wave activity and heart rate variability during sleep	
G. Brandenberger, J. Ehrhart, F. Piquard, C. Simon (France)	993
Diurnal variations in alpha power density and subjective sleepiness while performing repeated vigilance tasks	
S. Higuchi, Y. Liu, T. Yuasa, A. Maeda, Y. Motohashi (Japan)	99
EEG abnormalities in dementia reflect the parietal lobe syndrome	100
M. Matousek, M. Brunovsky, A. Edman, A. Wallin (Czech Republic, Sweden)	100

Using simulated neuronal cell models for detection of epileptic seizures in foramen ovale a K. Schindler, R. Wiest, M. Kollar, F. Donati (Switzerland)	nd scalp EEG
Neurophysiological evaluation of vigilance in epileptic patients on monotherapy with lamo E. Bonanni, R. Galli, S. Gori, L. Pasquali, M. Maestri, A. Iudice, L. Murri (Italy)	trigine
Statistical detection of between-group differences in event-related potentials	1018
A. Achim (Canada)     Mechanism of prolonged central motor conduction time in compressive cervical myelopath	1023
K. Kaneko, T. Taguchi, H. Morita, H. Yonemura, H. Fujimoto, S. Kawai (Japan)	1035
A useful electrophysiological test for diagnosis of minimal conduction block L. Padua, I. Aprile, P. D'Amico, F. Pauri, M. Sabatelli, P. Caliandro, P. Tonali (Italy)	1041
Magnetic pudendal neurostimulation: a novel method for measuring pudendal nerve termin A. Shafik (Egypt)	al motor latency
Modulation of upper extremity motor evoked potentials by cutaneous afferents in humans	
M. Kofler, P. Fuhr, A.A. Leis, F.X. Glocker, M.F. Kronenberg, J. Wissel, I. Stetkarova Germany, Czech Republic)	Austria, Switzerland, USA, 1053
Masseteric repetitive nerve stimulation in the diagnosis of myasthenia gravis	1000
G. Pavesi, L. Cattaneo, S. Tinchelli, D. Mancia (Italy)	1064
Electrophysiological assessments of primitive reflexes in stroke patients CW. Chang (Taiwan)	1070
Intraoperative motor evoked potentials to transcranial electrical stimulation during two ana	
L. Pelosi, M. Stevenson, G.J. Hobbs, A. Jardine, J.K. Webb (UK)	1076
Prestimulus cortical potentials predict the performance in a saccadic distractor paradigm S. Everling, A. Matthews, H. Flohr (Canada, Germany)	1088
Abnormal early stages of task stimulus processing in children with attention-deficit hypera- event-related gamma oscillations	
J. Yordanova, T. Banaschewski, V. Kolev, W. Woerner, A. Rothenberger (Bulgaria, Ge	rmany) 1096
Relationship between correlation dimension and indices of linear analysis in both respirato electroencephalogram	y movement and
N. Burioka, G. Cornélissen, F. Halberg, D.T. Kaplan (USA)	1147
The effect of state on sensory gating: comparison of waking, REM and non-REM sleep	
M.A. Kisley, A. Olincy, R. Freedman (USA)	for the second state of th
Changes of the brain electrical fields during the continuous performance test in attention-de depending on methylphenidate medication	encit hyperactivity disorder-boys
K.E. Zillessen, P. Scheuerpflug, A.J. Fallgatter, W.K. Strik, A. Warnke (Germany, Swit	zerland) 1166
Theta band power changes in normal and dyslexic children	
W. Klimesch, M. Doppelmayr, H. Wimmer, J. Schwaiger, D. Röhm, W. Gruber, F. Hut Alpha and beta band power changes in normal and dyslexic children	zler (Austria) 1174
W. Klimesch, M. Doppelmayr, H. Wimmer, W. Gruber, D. Röhm, J. Schwaiger, F. Hut	zler (Austria) 1186
Interpretation of interdependencies in epileptic signals using a macroscopic physiological macro	
F. Wendling, F. Bartolomei, J.J. Bellanger, P. Chauvel (France)	1201
Gamma band activity in an auditory oddball paradigm studied with the wavelet transform I.G. Gurtubay, M. Alegre, A. Labarga, A. Malanda, J. Iriarte, J. Artieda (Spain)	1219
Waveform of sympathetic skin response in diabetic patients	1217
M. Toyokura, H. Takeda (Japan)	1229
Clinical and neurophysiological outcome of surgery in extreme carpal tunnel syndrome	1007
M. Mondelli, F. Reale, R. Padua, I. Aprile, L. Padua (Italy)Synchronization of single motor units during voluntary contractions in the upper and lower	1237
MS. Kim, Y. Masakado, Y. Tomita, N. Chino, Y.S. Pae, K.E. Lee (Japan, South Kore)	
Anticipatory postural adjustments during load catching by standing subjects	
T. Shiratori, M.L. Latash (USA)	1250
Different responses to auditory and somaesthetic stimulation in patients with an excessive sepediatric experience	tartie: a report of
K. Oguro, H. Aiba, H. Hojo (Japan)	1266
Regulation of motor output between young and elderly subjects	
D. Earles, V. Vardaxis, D. Koceja (USA)	1273
Time-on-task analysis using wavelet networks in an event-related potential study on attenti H. Heinrich, G.H. Moll, H. Dickhaus, V. Kolev, J. Yordanova, A. Rothenberger (Germa	
Detection of non-linearity in the EEG of schizophrenic patients	
YJ. Lee, YS. Zhu, YH. Xu, MF. Shen, HX. Zhang, N.V. Thakor (China, USA)	1288
Regulating action: alternating activation of midline frontal and motor cortical networks P. Luu, D.M. Tucker (USA)	1295
1. Luu, D.M. Tuckel (USA)	1275

Uncoupling of contingent negative variation and alpha band event-related desynchronization in a go/no-go task	
S.R. Filipović, M. Jahanshahi, J.C. Rothwell (UK)	1307
Multiplicity in the high-frequency signals during the short-latency somatosensory evoked cortical activity in humans	
J. Haueisen, B. Schack, T. Meier, G. Curio, Y. Okada (Germany, USA)	1316
The temporal profile of interactions between sensory information from both hands in the secondary somatosensory cortex	
Y. Hamada, H. Kado, R. Suzuki (Japan)	1326
Two evoked responses with different recovery functions in the primary somatosensory cortex in humans	
M. Hoshiyama, R. Kakigi (Japan)	1334
Changes in the retinocortical evoked potentials in subjects 75 years of age and older	
L. Justino, H. Kergoat, MJ. Kergoat (Canada)	1343
Electrophysiological estimate of human cortical magnification	
S.D. Slotnick, S.A. Klein, T. Carney, E.E. Sutter (USA)	1349
Changes in electrovestibular brainstem responses after aminoglycoside intoxication in guinea pigs	1055
K. Sugasawa, R. Charlet de Sauvage, D.M. Lima da Costa, JP. Erre, M. Sugasawa, JM. Aran (Japan, France)	1357
Recurrent neural network-based approach for early recognition of Alzheimer's disease in EEG	1250
A.A. Petrosian, D.V. Prokhorov, W. Lajara-Nanson, R.B. Schiffer (USA)	1378
Time-variant non-linear phase-coupling analysis of EEG burst patterns in sedated patients during electroencephalic	
burst suppression period	1200
B. Schack, H. Witte, M. Helbig, Ch. Schelenz, M. Specht (Germany)	1388
Boundary element method volume conductor models for EEG source reconstruction	1400
M. Fuchs, M. Wagner, J. Kastner (Germany)	1400
Tracing of proximal lumbosacral nerve conduction – a comparison of simultaneous magneto – and electroneurography	1409
BM. Mackert, M. Burghoff, LH. Hiss, L. Trahms, G. Curio (Germany)	1408
Determinants of pain in needle electromyography	1414
J.A. Strommen, J.R. Daube (USA)  Alpha band power changes in unimanual and bimanual sequential movements, and during motor transitions	1414
MP. Deiber, R. Caldara, V. Ibañez, CA. Hauert (Switzerland, France)	1419
Motor cortex disinhibition in Alzheimer's disease	1417
J. Liepert, K.J. Bär, U. Meske, C. Weiller (Germany)	1436
Anterior spinal cord injury with preserved neurogenic 'motor' evoked potentials	1450
R.E. Minahan, J.P. Sepkuty, R.P. Lesser, P.D. Sponseller, J.P. Kostuik (USA)	1442
New graphical method to measure silent periods evoked by transcranial magnetic stimulation	1112
M.A. Garvey, U. Ziemann, D.A. Becker, C.A. Barker, J.J. Bartko (USA)	1451
Changes in corticomotor representations induced by prolonged peripheral nerve stimulation in humans	
M.C. Ridding, D.R. McKay, P.D. Thompson, T.S. Miles (Australia)	1461
The prolonged cortical silent period in patients with Huntington's disease	
N. Modugno, A. Currà, M. Giovannelli, A. Priori, F. Squitieri, S. Ruggieri, M. Manfredi, A. Berardelli (Italy)	1470
Somatosensory event-related potential and autonomic activity to varying pain reduction cognitive strategies in hypnosis	
V. De Pascalis, M.R. Magurano, A. Bellusci, A.C.N. Chen (Italy, Denmark)	1475
EEG changes during word and figure categorization	
T. Harmony, T. Fernández, A. Fernández-Bouzas, J. Silva-Pereyra, J. Bosch, L. Díaz-Comas, L. Galán (Mexico, Cuba)	1486
An integration of 40 Hz Gamma and phasic arousal: novelty and routinization processing in schizophrenia	
KH. Lee, L.M. Williams, A. Haig, E. Goldberg, E. Gordon (Australia, USA)	1499
CNS recovery from cocaine, cocaine and alcohol, or opioid dependence: a P300 study	
L.O. Bauer (USA)	1508
Specific somatosensory processing in somatosensory area 3b for human thumb: a neuromagnetic study	
M. Tanosaki, I. Hashimoto, Y. Iguchi, T. Kimura, R. Takino, Y. Kurobe, Y. Haruta, Y. Hoshi (Japan)	1516
Olfactory event-related potentials in patients with brain tumors	
C. Daniels, B. Gottwald, B.M. Pause, B. Sojka, H.M. Mehdorn, R. Ferstl (Germany)	1523
Brain-stem compression in vertebrobasilar dolichoectasia. A multimodal electrophysiological study	
S. Passero, S. Rossi, F. Giannini, D. Nuti (Italy)	1531
Internight reliability and benchmark values for computer analyses of non-rapid eye movement (NREM) and REM EEG	
in normal young adult and elderly subjects	
X. Tan, I.G. Campbell, I. Feinberg (USA)	1540
Automatic alignment of EEG/MEG and MRI data sets	1550
D. Kozinska, F. Carducci, K. Nowinski (Poland, Italy)	1553
The development of a software program for analyzing skin conductance changes in preterm infants	1500
H. Storm (Norway)	1562
Electrophysiologic studies in critical illness associated weakness: myopathy or neuropathy – a reappraisal	1506
W. Trojaborg, L.H. Weimer, A.P. Hays (USA)	1586

Regularity of force tremor in Parkinson's disease D.E. Vaillancourt, A.B. Slifkin, K.M. Newell (USA)	1594
Intracortical inhibition and facilitation in human facial motor area: difference between upper and lower facial area M. Kobayashi, H. Théoret, FM. Mottaghy, M. Gangitano, A. Pascual-Leone (USA)	1604
Enhanced associated movements in the contralateral limbs elicited by brisk voluntary contraction in choreic disorders	
T. Hashimoto, M. Shindo, N. Yanagisawa (Japan) Distinct multi-joint control strategies in spastic diplegia associated with prematurity or Angelman syndrome	1612
B. Dan, E. Bouillot, A. Bengoetxea, S.G. Boyd, G. Cheron (Belgium, UK)  Electromyographic differentiation of tremors	1618
I. Milanov (Bulgaria)  Inhibition of motor system excitability at cortical and spinal level by tonic muscle pain	1626
D. Le Pera, T. Graven-Nielsen, M. Valeriani, A. Oliviero, V. Di Lazzaro, P.A. Tonali, L. Arendt-Nielsen (Denmark, Italy) Steep early negative slopes can be demonstrated in pre-movement bereitschaftspotential	1633
M. Kukleta, M. Lamarche (Czech Republic, France) Response to the first stimulus determines reduced auditory evoked response suppression in schizophrenia: single trials	1642
analysis using MEG L.D. Blumenfeld, B.A. Clementz (USA)	1650
Response priming in a go/nogo task: do we have to explain the go/nogo N2 effect in terms of response activation instead of inhibition?	
K.J. Bruin, A.A. Wijers, A.S.J. van Staveren (The Netherlands)	1660
Transcranial magnetic stimulation of left prefrontal cortex impairs working memory B.R. Mull, M. Seyal (USA)	1672
Button-pressing affects P300 amplitude and scalp topography	1676
D.F. Salisbury, B. Rutherford, M.E. Shenton, R.W. McCarley (USA)  Neuromagnetic activity in alpha and beta bands reflect learning-induced increases in coordinative stability	1676
K.J. Jantzen, A. Fuchs, J.M. Mayville, L. Deecke, J.A.S. Kelso (USA, Austria)	1685
The use of phase in the detection of auditory steady-state responses T.W. Picton, A. Dimitrijevic, M.S. John, P. Van Roon (Canada)	1698
The mismatch negativity as an index of temporal processing in audition	1070
T. Kujala, J. Kallio, M. Tervaniemi, R. Näätänen (Finland)	1712
Identification of principal components in cortical evoked potentials by brief surface cooling  E. Kublik, P. Musiał, A. Wróbel (Poland)	1720
BIPLEDs in akinetic mutism caused by bilateral anterior cerebral artery infarction	
J. Nicolai, M.J.A.M. van Putten, D.L.J. Tavy (The Netherlands)	1726
Estimation of the EEG power spectrum using MRI T <sub>2</sub> relaxation time in traumatic brain injury R.W. Thatcher, C. Biver, J.F. Gomez, D. North, R. Curtin, R.A. Walker, A. Salazar (USA)	1729
Neural networks involving the medial temporal structures in temporal lobe epilepsy	1127
F. Bartolomei, F. Wendling, JJ. Bellanger, J. Régis, P. Chauvel (France)	1746
Cortical current density reconstruction of interictal epileptiform activity in temporal lobe epilepsy	1761
HJ. Huppertz, S. Hoegg, C. Sick, C.H. Lücking, J. Zentner, A. Schulze-Bonhage, R. Kristeva-Feige (Germany) The effect of the skull on event-related P300	1761
T. Frodl, E.M. Meisenzahl, D. Müller, G. Leinsinger, G. Juckel, K. Hahn, HJ. Möller, U. Hegerl (Germany) The influence of electrode location errors on EEG dipole source localization with a realistic head model	1773
Y. Wang, J. Gotman (Canada)	1777
Transcranial magnetic stimulation coregistered with MRI: a comparison of a guided versus blind stimulation technique and its effect on evoked compound muscle action potentials	
L.D. Gugino, J.R. Romero, L. Aglio, D. Titone, M. Ramirez, A. Pascual-Leone, E. Grimson, N. Weisenfeld, R. Kikinis,	
ME. Shenton (USA)	1781
Precision grip deficits in cerebellar disorders in man S.J. Fellows, J. Ernst, M. Schwarz, R. Töpper, J. Noth (Germany)	1793
Cortical myoclonus in Janz syndrome F. Panzica, G. Rubboli, S. Franceschetti, G. Avanzini, S. Meletti, A. Pozzi, C.A. Tassinari (Italy)	1803
Inhibitory conditioning stimulus in transcranial magnetic stimulation reduces the number of excited spinal motor neurons	
V. Mall, FX. Glocker, U. Fietzek, F. Heinen, S. Berweck, R. Korinthenberg, K.M. Rösler (Germany, Switzerland) Relation between changes in long-latency stretch reflexes and muscle stiffness in Parkinson's disease – comparison before	1810
and after unilateral pallidotomy R. Hayashi, T. Hashimoto, T. Tada, S. Ikeda (Japan)	1814
Differential modulation of motor evoked potential and silent period by activation of intracortical inhibitory circuits	
C. Trompetto, A. Buccolieri, L. Marinelli, G. Abbruzzese (Italy)	1822
Head extensor reflex evoked by trigeminal stimulation in humans  M. Leandri, A. Gottlieb, G. Cruscu (Italy)	1828

A double-dissociation of English past-tense production revealed by event-related potentials and low-resolution	
electromagnetic tomography (LORETA)	1833
A. Lavric, D. Pizzagalli, S. Forstmeier, G. Rippon (UK, USA, Germany)  Neuromagnetic source localization of auditory evoked fields and intracerebral evoked potentials: a comparison of data	1033
in the same patients	
B. Godey, D. Schwartz, J.B. de Graaf, P. Chauvel, C. Liégeois-Chauvel (France)	1850
Morphological and functional retinal impairment in Alzheimer's disease patients	
V. Parisi, R. Restuccia, F. Fattapposta, C. Mina, M.G. Bucci, F. Pierelli (Italy)	1860
Scalp topography of ultralate (C-fibres) evoked potentials following thulium YAG laser stimuli to tiny skin surface areas	
in humans	
E. Opsommer, T. Weiss, W.H.R. Miltner, L. Plaghki (Belgium, Germany)	1868
Characteristics of habituation of the sympathetic skin response to repeated electrical stimuli in man	1075
P. Cariga, M. Catley, C.J. Mathias, P.H. Ellaway (UK)	1875
Simultaneous recording of late and ultra-late pain evoked potentials in fibromyalgia	1881
M. Granot, D. Buskila, Y. Granovsky, E. Sprecher, L. Neumann, D. Yarnitsky (Israel)  Absence of sleep EEG markers in fatal familial insomnia healthy carriers: a spectral analysis study	1001
F. Ferrillo, G. Plazzi, L. Nobili, M. Beelke, F. De Carli, P. Cortelli, P. Tinuper, P. Avoni, S. Vandi, P. Gambetti,	
E. Lugaresi, P. Montagna (Italy, USA)	1888
Automated detection of tracé alternant during sleep in healthy full-term neonates using discrete wavelet transform	
J.P. Turnbull, K.A. Loparo, M.W. Johnson, M.S. Scher (USA)	1893
Antero-posterior EEG changes during the wakefulness-sleep transition	
L. De Gennaro, M. Ferrara, G. Curcio, R. Cristiani (Italy)	1901
Temporal relationship of generalized epileptiform discharges to spindle frequency activity in childhood absence epilepsy	
L. Nobili, M.G. Baglietto, M. Beelke, F. De Carli, E. Veneselli, F. Ferrillo (Italy)	1912
Warp-averaging event-related potentials	1017
K. Wang, H. Begleiter, B. Porjesz (USA)	1917
A surface EMG analysis of sarcolemma excitability alteration and myofibre degeneration in Steinert disease C. Chisari, C. Simonella, B. Rossi (Italy)	1925
Decreased EMG inhibition following electrical stimulation over muscle tendons in myopathies	1740
A. Priori, C. Cinnante, A. Pesenti, A. Gallanti, A. Cappellari, G. Scarlato, S. Barbieri (Italy)	1931
Proximal motor conduction evaluated by transcranial magnetic stimulation in acquired inflammatory demyelinating neuropathies	
A. Inaba, T. Yokota, Y. Saito, T. Ichikawa, H. Mizusawa (Japan)	1936
Symptoms and neurophysiological picture of carpal tunnel syndrome in pregnancy	
L. Padua, I. Aprile, P. Caliandro, T. Carboni, A. Meloni, S. Massi, O. Mazza, M. Mondelli, A. Morini, D. Murasecco,	
M. Romano, P. Tonali, for the Italian Carpal Tunnel Syndrome Study Group (Italy)	1946
Vestibulocollic reflexes: normal values and the effect of age	
M.S. Welgampola, J.G. Colebatch (Australia)	1971
Electrophysiological analysis of cortical mechanisms of selective attention to high and low spatial frequencies	1000
A. Martínez, F. Di Russo, L. Anllo-Vento, S.A. Hillyard (USA)	1980
Source generators of the early somatosensory evoked potentials to tibial nerve stimulation: an intracerebral and scalp recording study	
M. Valeriani, A. Insola, D. Restuccia, D. Le Pera, P. Mazzone, M.G. Altibrandi, P. Tonali (Italy)	1999
Cutaneous afferents mediating the cutaneous silent period in the upper limbs: evidences for a role of low-threshold	1,,,,
sensory fibres	
M. Serrao, L. Parisi, F. Pierelli, P. Rossi (Italy)	2007
The influence of current direction on phosphene thresholds evoked by transcranial magnetic stimulation	
T. Kammer, S. Beck, M. Erb, W. Grodd (Germany)	2015
Basal ganglia involvement in sensory and cognitive processing. A depth electrode CNV study in human subjects	
M. Bareš, I. Rektor (Czech Republic)	2022
Auditory information processing during human sleep as revealed by event-related brain potentials	2021
M. Atienza, J.L. Cantero, C. Escera (Spain)	2031
Relationship between Delta, Sigma, Beta, and Gamma EEG bands at REM sleep onset and REM sleep end	2046
R. Ferri, F.I.I. Cosentino, M. Elia, S.A. Musumeci, R. Marinig, P. Bergonzi (Italy)  Topography of <i>foramen ovale</i> electrodes by 3D image reconstruction	2046
H.G. Wieser, U. Schwarz (Switzerland)	2053
Effects of emotional arousal in the cerebral hemispheres: a study of oscillatory brain activity and event-related potentials	2033
A. Keil, M.M. Müller, T. Gruber, C. Wienbruch, M. Stolarova, T. Elbert (Germany, UK, USA)	2057
Parieto-temporal rhythms in the 6–9 Hz band recorded in epileptic patients with depth electrodes in a self-paced	
movement protocol	
B. Turak, J. Louvel, P. Buser, M. Lamarche (France)	2069

Quantitative analysis of the electroencephalogram during cranial electrotherapy stimulation	
M.J. Schroeder, R.E. Barr (USA)	2075
Evidence for distinct beta resonance frequencies in human EEG related to specific sensorimotor cortical areas C. Neuper, G. Pfurtscheller (Austria)	2084
EEG-defined subtypes of children with attention-deficit/hyperactivity disorder A.R. Clarke, R.J. Barry, R. McCarthy, M. Selikowitz (Australia)	2098
Neurophysiological study of secondary synchronous occipito-frontopolar spikes in childhood M. Ueno, H. Oguni, K. Yasuda, M. Osawa (Japan)	2106
Neurographic assessment of lesions of single proper digital nerves F. Spaans (The Netherlands)	2113
The motor nerve simulator	
E. Stålberg, L. Karlsson (Sweden) Delay of simple reaction time after levodopa intake	2118
T. Müller, S. Benz, C. Börnke (Germany)  Are the after-effects of low-frequency rTMS on motor cortex excitability due to changes in the efficacy of cortical synapses?	2133
T. Touge, W. Gerschlager, P. Brown, J.C. Rothwell (Japan, UK, Austria)  Movement-related potentials in the basal ganglia: a SEEG readiness potential study	2138
I. Rektor, M. Bareš, D. Kubová (Czech Republic)  Decreased sensory cortical excitability after 1 Hz rTMS over the ipsilateral primary motor cortex	2146
H. Enomoto, Y. Ugawa, R. Hanajima, K. Yuasa, H. Mochizuki, Y. Terao, Y. Shiio, T. Furubayashi, N.K. Iwata, I. Kanazawa (Japan)	2154
Modulation of the soleus H-reflex in prone human subjects using galvanic vestibular stimulation P.M. Kennedy, J.T. Inglis (Canada)	2159
P3a from a passive visual stimulus task YW. Jeon, J. Polich (South Korea, USA)	2202
Modulation of startle and the startle-elicited P300 by the conditions of the cued continuous performance task in school-age boys E.M. Ornitz, JG. Gehricke, A.T. Russell, R. Pynoos, P. Siddarth (USA)	2209
Electrophysiological correlates for response inhibition in a Go/NoGo task H. Bokura, S. Yamaguchi, S. Kobayashi (Japan)	2224
Event-related desynchronization and synchronization during a memory task in children C.M. Krause, PA. Salminen, L. Sillanmäki, I.E. Holopainen (Finland)	2233
Time dynamics of stimulus- and event-related gamma band activity: contrast-VEPs and the visual P300 in man W.G. Sannita, F. Bandini, M. Beelke, F. De Carli, S. Carozzo, D. Gesino, L. Mazzella, C. Ogliastro, L. Narici (Italy, USA)	2241
Changes of middle latency somatosensory evoked potentials (SEPs) and alpha rythmicity associated with oculomotor processes M. Kamoda, T. Touge, M. Ikeguchia, K. Deguchi, S. Watanabe, H. Takeuchi (Japan)	2250
Bladder filling inhibits somatic spinal motoneurones	
M. Inghilleri, A. Carbone, F. Pedace, A. Conte, V. Frasca, A. Berardelli, G. Cruccu, M. Manfredi (Italy) Somatosensory evoked high frequency oscillations recorded from subdural electrodes	2255
Y. Kojima, T. Uozumi, N. Akamatsu, K. Matsunaga, E. Urasaki, S. Tsuji (Japan)  Investigation of the sleep electrocorticogram of the common marmoset ( <i>Callithrix jacchus</i> ) using radiotelemetry	2261
H.S. Crofts, S. Wilson, N.G. Muggleton, D.J. Nutt, E.A.M. Scott, P.C. Pearce (UK)  Non-linear EEG analysis in children with epilepsy and electrical status epilepticus during slow-wave sleep (ESES)	2265
R. Ferri, M. Elia, S.A. Musumeci, C.J. Stam (Italy, The Netherlands) Cerebral blood flow and sources of abnormal EEG activity (VARETA) in neurocysticercosis	2274
A. Fernández-Bouzas, T. Harmony, T. Fernández, J. Ricardo-Garcell, G. Casián, R. Sánchez-Conde (Mexico)	2281
Experimental tests of EEG source localization accuracy in realistically shaped head models B.N. Cuffin, D.L. Schomer, J.R. Ives, H. Blume (USA)	2288
The stimulus intensity modifies the blink reflex recovery cycle in healthy subjects and in blepharospasm M. Sommer, A. Ferbert (Germany)	2293
The soleus late response elicited by transcranial magnetic stimulation reflects agonist-antagonist postural adjustment in the lower limbs	
R. Suga, S. Tobimatsu, T. Taniwaki, Ji. Kira, M. Kato (Japan)  Motor evoked potentials from masseter muscle induced by transcranial magnetic stimulation of the pyramidal tract: the	2300
importance of coil orientation A.G. Guggisberg, P. Dubach, C.W. Hess, C. Wüthrich, J. Mathis (Switzerland)	2312

#### **Brief Communication**

Characterization of the mu rhythm during rapid eye movement sleep S.P. Duntley, A.H. Kim, D.L. Silbergeld, J.W. Miller (USA)

528

Heart rate changes during sleep in response to experimental thermal (nociceptive) stimulations in healthy subjects G.J. Lavigne, M. Zucconi, V. Castronovo, C. Manzini, F. Veglia, S. Smirne, L. Ferini-Strambi (Canada, Italy) 532 Case Report Simultaneous EEG and functional MRI of epileptic activity: a case report 1196 J. Baudewig, H.J. Bittermann, W. Paulus, J. Frahm (Germany) Letters to the Editors On absence seizures and oculomotor phenomena 563 E. Anagnostou (Germany) Reply to E. Anagnostou 'On absence seizures and oculomotor phenomena' 563 D. Bogacz (Uruguay) A safety screening questionnaire for transcranial magnetic stimulation 720 J.C. Keel, M.J. Smith, E.M. Wassermann (USA) The problem of conduction velocity of the human spinothalamic tract 1113 G.D. Iannetti, G. Cruccu, M. Manfredi (Italy) Reply to Dr Cruccu P. Rossi, M. Serrao, G. Pozzessere, F. Pierelli (Italy) 1114 Reply to Dr Cruccu 1115 R. Kakigi (Japan) Soleus H-reflex changes during loading and unloading of the spine and their relation to the diagnosis of lumbosacral radiculopathy in mechanical back pain 1952 R. Mazzocchio (Italy) Reply to Dr Mazzocchio 1953 M.A. Sabbahi (USA) Seizures and epileptiform EEG abnormalities in FRAXE syndrome 1954 S.A. Musumeci, R. Ferri, C. Scuderi, P. Bosco, M. Elia (Italy) Effect of subliminally perceived stimulus differences or of superliminally perceived order differences? 1956 R. Verleger (Germany) Reply to Dr Verleger 1957 E. Bernat (USA) Detecting 'minimal block' with a SFEMG needle J.G. van Dijk (The Netherlands) 2164 Reply to Dr van Dijk L. Padua, I. Aprile, P. D'Amico, F. Pauri, M. Sabatelli, P. Caliandro, P. Tonali (Italy) 2164 Book Reviews The Neurocognition of Language - Colin M. Brown and Peter Hagoort (Eds.), Oxford University Press, Oxford, UK, 2000 J. Pujol (Spain) 953 Sleep Disorders Medicine: Basic Science, Technical Considerations, and Clinical Aspects - S. Chokroverty 1109 J. Santamaria (Spain) Localization of Brain Lesions and Developmental Functions - Daria Riva and Arthur Benton 1110 M.L. Berthier (Spain) EMG Waveforms: Video and companion guide to electromyography and neuromuscular disorders - D.C. Preston and B.E. Shapiro 2320 C. Lomen-Hoerth (USA) The Cranio-Cervical Syndrome: Mechanisms, Assessment and Treatment - H. Vernon J. Chu (USA) 2320 Limbic seizures in children - G. Avanzini, A. Beaumanoir and L. Mira 2321 J. Engel Jr. (USA) Society Proceedings The British Society for Clinical Neurophysiology London, 24th March 2000 950 L.M. Henderson (UK) The British Society for Clinical Neurophysiology, London, 20 October 2000 L.M. Henderson (UK) 1117 30th Annual Meeting of Japanese Society of Clinical Neurophysiology, Kyoto, Japan, 13-15 December 2000 1119 H. Shibasaki (Japan) 38th Annual Meeting of the SENFC (Spanish Society of Clinical Neurophysiology), Barcelona, Spain, December 14-16, 2000 1128 M. Ferrándiz (Spain)

#### Table of Contents

2421 47th Congress of the Czech and Slovak Society of Clinical Neurophysiology, Teplice, Czech Republic, 14-16 December 2000 S. Nevsimalova (Czech Republic) 1139

The British Society for Clinical Neurophysiology, Birmingham, 27 March 1998 1958 The British Society for Clinical Neurophysiology, London, 19-20 June 1998 1960

The British Society for Clinical Neurophysiology, London, 30 October 1998 1964 The British Society for Clinical Neurophysiology, London, 8-9 March 2001 1967

Abstracts of Presentations: 48th Annual Scientific Meeting, American Association of Electrodiagnostic Medicine, Albuquerque, NM, 3-6 October 2001 2166 The British Society for Clinical Neurophysiology, Southampton, 25 June 1999

L.M. Henderson (UK) 2323 The British Society for Clinical Neurophysiology, London, 22 October 1999

L.M. Henderson (UK) 2326 Western Clinical Neurophysiology Society, Reno, NV, USA, 2-3 February 2001 2328

P. Garcia (USA) The British Society for Clinical Neurophysiology, London, 15 June 2001 L.M. Henderson (UK) 2331

The Italian Society for Clinical Neurophysiology L. Santoro 2333

Acknowledgement to reviewers 2356

Index of Authors to Volume 112 2359

Index of Subjects to Volume 112 2375

2410

Table of Contents to Volume 112



